

## **A method for retrieval of atmosphere optical properties from spectroradiometer measurement**

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In this study, we discussed the method of deriving atmosphere optical thickness (AOT) from spectroradiometer measurement. The proposed technique is adapted from the retrieval of AOT values from the sky transmittance values and then correlated to the concentration of particulate matters of less than 10 micron (PM10). In situ PM10 concentration measurements were collected simultaneously with the sky transmittance measurements. The sky transmittances were measured using handheld spectroradiometer and the AOT values were made in spectral region of 550nm. A linear correlation was obtained between the AOT and PM10 values in this study. Finally, a PM10 map was generated using interpolation technique called Kriging. This study shown the usefulness of the spectroradiometer for generated the PM10 map.

Keywords: AOT; spectroradiometer; sky transmittance

### **References**

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